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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,160

08/01/2006

Hanneke Boerstoeel

128879

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25944 7590 07/11/2008

OLIFF & BERRIDGE, PLC

P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

EDWARDS, NEWTON O

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

07/11/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,160	<b>Applicant(s)</b> BOERSTOEL ET AL.	
	<b>Examiner</b> N Edwards	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/13/08.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/19/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

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Applicant urges that 1) all claims 1-13 is sufficiently related that a thorough search for the subject matter of any group of claims would encompass a search of the remaining claims. A search and examination could be made without a serious burden.

First of all, applicant has failed to address the Lack of Unity on the merits (37 CFR 1.475 and PCT rule 13) as presented. Secondly Applicant has failed to state a search that would encompass all the claims as alleged. Third, an undue burden is shown of the Primary Examiner by the divergent subject matter ( a composite, a method of making a spin dope, and multifilament fibers). The restriction (Lack of Unity) is proper for reasons of record and hereby made FINAL. Note claims 11 and 12 with claim 1-5 will be examined for customer service

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-5, 11, and 12 are rejected under 35 U.S.C. 102(b or a) as being clearly anticipated by Hu (WO 03085049 A1 ) alone or optionally taken with Johnson (WO 0380513 A2).

For the record, the invention defined by a product by process claim is a **PRODUCT** and NOT a process. In re Bridgeford, 357 F.2d 679. It is the patentability of the product

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claimed and **NOT of the recited process steps which must be established.** In re Brown, 459 F. 2d 531; In re Wertheim, 541 F. 2d 257. Thus, the product recited by the product by process claims 1,5,11, and 12 is fibers made from a composite material of PPTA and nanotubes having an aspect ratio and diameter as claimed.

Hu teaches a composite material made from a mixture of single wall carbon nanotubes (SWNT) and aromatic polyamide such as PPTA. Hu further teaches the SWNT has a diameter in the range of 0.5 nm to about 3.5nm and a tensile strength and modulus as high as 100GPA, for example. Hu still further teaches that the composite contains at least about 1 wt% to at least about 10 % by wt SWNT . Hu yet still further teaches the composite is made into fibers (which includes yarn and multifilament fibers) at page 2 lines 8-10. See page 1 lines 5-20, Page 5 lines 1-10, and page 6lines 28-30 of Hu for example.

Regarding the issue of aspect ratio, the Primary Examiner has a reason to believe that Hu SWNT inherently possesses the claimed aspect ratio due to the same structural Identity (SWNT) as claimed.

Johnson was cited to show SWNT as disclosed in Hu inherently possess an aspect ratio of greater than about 100 as claimed. See page 10 lines 1-5 of Johnson, for example.

The cited patent disclose the state of the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to N Edwards whose telephone number is 571-272-1521.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached on 571-272-3198. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/N Edwards/  
Primary Examiner  
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